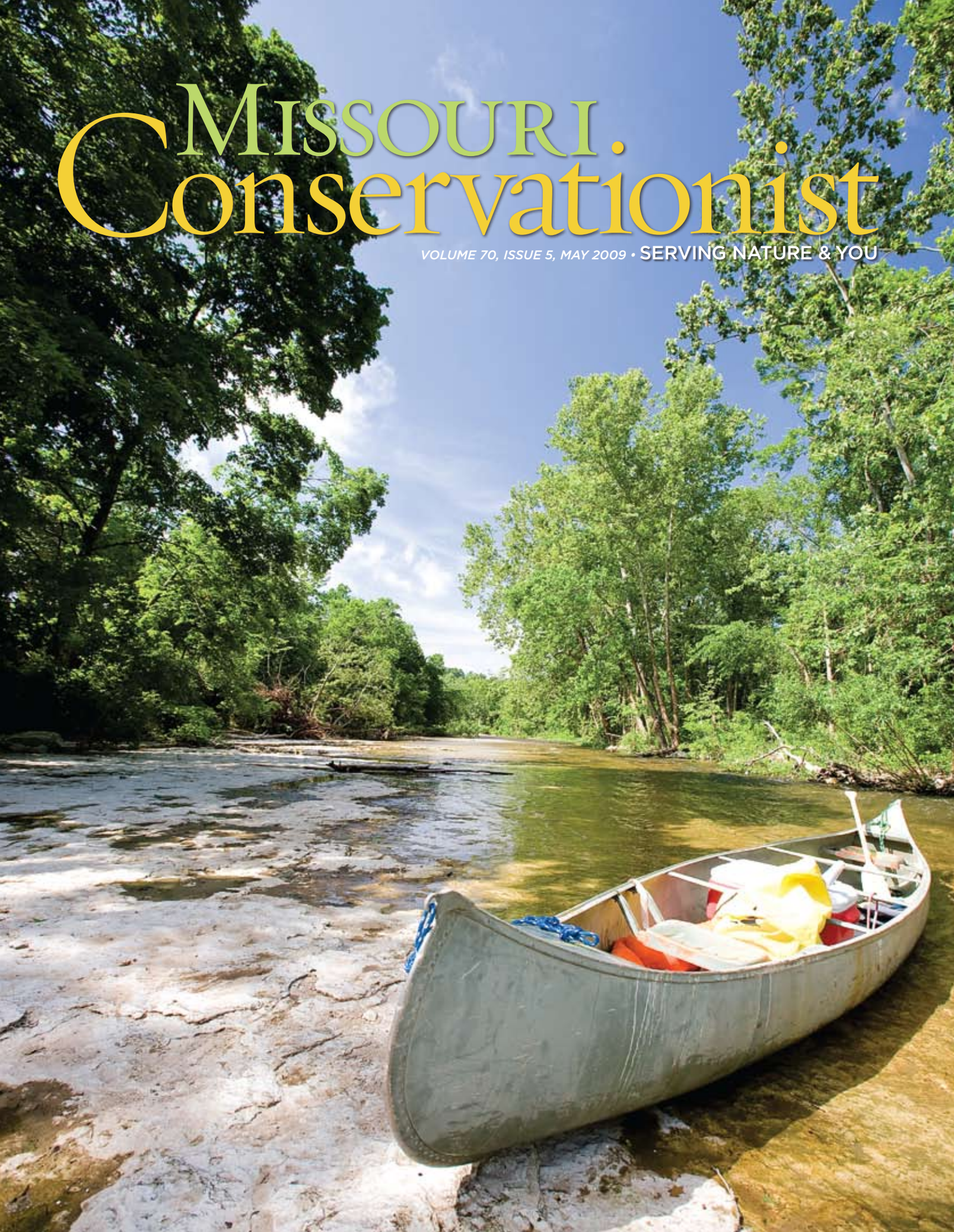


MISSOURI. Conservationist

VOLUME 70, ISSUE 5, MAY 2009 • SERVING NATURE & YOU



The Point of Regulations ...

As a youngster, my dad treated me to an assortment of hunting and fishing adventures. He was a terrific outdoorsman who taught me the essentials, and he demonstrated outdoor

responsibility in a way I did not appreciate as a youth. He was a stickler for regulations and shared the view that a person's character is on display most when no one else is looking.

As an assistant director with the Department of Conservation, one of my assignments is to chair the agency's Regulations Committee. The Committee pours through data, surveys, staff recommendations and public thoughts to formulate recommendations ultimately considered by the Conservation Commission.

Hunting and fishing regulations are adopted for different purposes. The most important is to ensure resources are not overused. Some species are much more influenced by harvest than others. For example, hunting is without question the most important factor affecting deer numbers. When deer were uncommon, buck-only seasons were appropriate. Now that herd control is paramount, regulations such as antler restrictions are designed to target does.

For other species, harvest impacts may be less important. Wild turkey harvests, for example, don't have much bearing on overall turkey populations because turkey numbers fluctuate largely in response to their annual reproductive success. A three-week spring season targeting gobblers isn't likely to diminish the turkey population because toms are harvested after breeding has occurred. A two-bird limit is applied with no more than one bird taken during the first week of the season. In this case, the two-bird limit is designed to fairly distribute harvest among hunters. Bag limits are usually employed to ensure a fair

distribution of harvest more than to limit total harvest.

Other regulations reflect values, culture and traditions. To be certain, these vary from state to state, but are very real.

Baiting for the purpose of hunting has long been illegal in Missouri because it provides unfair advantage to the hunter, concentrates wildlife in an unnatural fashion, creates conflicts among landowners and might have disease transmission implications. Most species cannot be hunted at night because it is considered unethical. Hand fishing has been banned since 1919. The removal of parent catfish from nests dooms reproduction because a fatal fungus forms on catfish eggs. Hand fishing also targets the largest fish that take years to reach their size and removes fish when they would otherwise be invulnerable to legal fishing because they are tending their eggs.

Hunting and fishing regulations serve a variety of purposes. Certainly their primary intent is to protect the fish and wildlife Missourians cherish. However, they also reflect standards of fair chase and are sometimes designed to ensure that allowable harvests are fairly distributed.

The Department takes its responsibility for establishing effective regulations very seriously, and it welcomes ideas from citizens on how regulations can be improved. If you have ideas, we'd like to hear from you!

Dave Erickson, assistant director











OUR MISSION: *To protect and manage the fish, forest and wildlife resources of the state; to serve the public and facilitate their participation in resource management activities; and to provide opportunity for all citizens to use, enjoy and learn about fish, forest and wildlife resources.*



Cover image of the Finley River and the longear sunfish at left by David Stonner. Read about floating down the Finley River in Loring Bullard's article starting on Page 14. To find out about using live bait to fish, read Mark Goodwin's article starting on Page 26.

NextGEN

This section reports on goals established in *The Next Generation of Conservation*. To read more about this plan, visit www.MissouriConservation.org/12843.

- 5  PLANTS & ANIMALS
- 6  PLACES TO GO
- 7  COMMUNITY CONSERVATION
- 8  OUTDOOR RECREATION
- 10  CLEAN WATER
- 11  HEALTHY FORESTS
- 12  LANDOWNER ASSISTANCE
- 13  CONSERVATION EDUCATION

FEATURES

- 14 **May Day on the Finley**
by Loring Bullard, photos by David Stonner
A floater's-eye view of spring.
- 20 **Call Before You Cut**
by Steve Westin, photos by David Stonner
A forester can help you avoid woodland management mistakes that persist for decades.
- 26 **Live Bait Basics**
by Mark Goodwin, illustration by Mark Raithel, photos by David Stonner
When fishing with kids, take the natural path to success.

MISCELLANY

- 2 **Letters**
- 4 **Ombudsman**
- 32 **Hunting and Fishing Calendar**
- 32 **Contributors**
- 33 **Time Capsule**
- 33 **Agent Notes**





GOOD BILLING

I was ecstatic to learn about the several facets of the Farm Bill in your February issue [*Paying*

it Forward; Page 20]. I have always stressed the importance of comprehensive conservation and restoration projects, as plants, animals, soil and water are all necessary aspects of sustainable land management. And it's great to hear that landowners can receive assistance in restoring unused or damaged land, managing waste runoff, and setting aside land for wetlands, reforestation, or quail habitat. The concerted effort not only directly benefits local wildlife and flora, but also indirectly benefits water quality and helps control soil erosion and flooding. Thank you for shedding light on this subject!

Mark Ostendorf, Joplin

SADIE & KATIE

My 4-year-old son, Noah, and I like to read your magazine together every month. We both enjoy learning about the outdoors in Missouri. We live in Liberty and found the back cover story

[March] about John Wheeler's quail habitat interesting, but one nagging question remained for Noah: What are their dogs named?

Noah and Justin Watermann, via Internet

Photographer's note: Both of the dogs are registered Llewellyn setters, and they are mother and daughter. The dog on the right is named Katie and she is the mother to the dog on the left, named Sadie. They were excellent bird dogs and



we had a fun afternoon flushing quail for photographs. — David Stonner

EXTRA-ORDINARY GIRLS

I just had a chance to look at the January issue while substituting at Lebanon Senior High School. I really enjoyed the article on Tori McAfee [*An Ordinary Outdoor Girl*; Page 32]. I, too, have Spina Bifida and love to hunt and fish. Unfortunately, I didn't get to enjoy the outdoors when I was her age, but I take in every minute that I can now. This past deer season I participated in a managed deer hunt in Warsaw, and I was able to harvest three does. There are a lot of volunteers to help make this hunt possible and they do everything they can to accommodate every hunter's needs. Thanks for the article on Tori. She is an inspiration to us all!

Rachel Pamperin, via Internet

RATE UPDATE

After reading the *2009 Regulations Update* [Page 26] in the March issue, please forward my gratitude to the parties involved in lowering the cost of the youth deer and turkey permits. The full cost of the permits was quite a burden on our bank account come hunting season.

Todd Bash, Plattsburg

INTERNATIONAL ANGLER

I would like to compliment you on your marvelous magazine. In the March issue I read the article on paddlefishing with the great picture [*Osage Accesses to Paddlefishing*; Page 8]. This brought up wonderful memories. We visited the USA twice and stayed with the Durreman family in Lebanon, Mo. Together with Bill Durreman I frequently went fishing, and at the Truman Dam Bill caught a paddlefish. Such an animal I had never seen before because we don't catch them in the Netherlands. We also went fishing in Bennett Spring, catching trout, and on the Missouri River we went fishing by boat. My wife and I had a great time in Missouri and enjoyed its nature a lot. Missouri is magnificent! The Netherlands is a wonderful country, too, with beautiful nature. I often go out fishing for pike and pike-perch. Wishing you lots of success with your great magazine.

Arend van der Slaat, The Netherlands

MISSOURI. Conservationist

GOVERNOR Jay Nixon

THE CONSERVATION COMMISSION

Don Johnson
Chip McGeehan
Lowell Mohler
Becky Plattner

Director John Hoskins
Assistant Director Dave Erickson
Assistant Director Tim Ripperger
Assistant Director Robert Ziehmer
Internal Auditor Nancy Dubbert
General Counsel Tracy McGinnis

DIVISION CHIEFS

Administrative Services Carter Campbell
Design and Development Bill Lueckenhoff
Fisheries Bill Turner
Forestry Lisa G. Allen
Human Resources Debbie Strobel
Outreach & Education Lorna Domke
Private Land Services Bill McGuire
Protection Larry Yamnitz
Resource Science Ronald Dent
Wildlife Dee Cee Darrow

CONSERVATIONIST STAFF

Editor In Chief Ara Clark
Managing Editor Nichole LeClair
Art Director Cliff White
Writer/Editor Tom Cwynar
Staff Writer Bonnie Chasteen
Staff Writer Jim Low
Photographer Noppadol Paothong
Photographer David Stonner
Designer Stephanie Thurber
Artist Dave Besenger
Artist Mark Raithel
Circulation Laura Scheuler

The *Missouri Conservationist* (ISSN 0026-6515) is the official monthly publication of the Missouri Department of Conservation, 2901 West Truman Boulevard, Jefferson City, MO (Mailing address: PO Box 180, Jefferson City, MO 65102.) Subscription free to adult Missouri residents; out of state \$7 per year; out of country \$10 per year. Notification of address change must include both old and new address (send mailing label with the subscriber number on it) with 60-day notice. Preferred periodical postage paid at Jefferson City, Mo., and at additional entry offices. Postmaster: Send correspondence to Circulation, PO Box 180, Jefferson City, MO 65102-0180. Phone: 573-522-4115, ext. 3856 or 3249. Copyright © 2009 by the Conservation Commission of the State of Missouri.

Equal opportunity to participate in and benefit from programs of the Missouri Department of Conservation is available to all individuals without regard to their race, color, national origin, sex, age or disability. Questions should be directed to the Department of Conservation, PO Box 180, Jefferson City, MO 65102, 573-751-4115 (voice) or 800-735-2966 (TTY), or to the U.S. Fish and Wildlife Service Division of Federal Assistance, 4401 N. Fairfax Drive, Mail Stop: MBSP-4020, Arlington, VA 22203.

Printed with soy ink



DEPARTMENT HEADQUARTERS

Phone: 573-751-4115
Address: PO Box 180,
Jefferson City 65102-0180

REGIONAL OFFICES

Southeast/Cape Girardeau: 573-290-5730
Central/Columbia: 573-884-6861
Kansas City: 816-655-6250
Northeast/Kirksville: 660-785-2420
Southwest/Springfield: 417-895-6880
Northwest/St. Joseph: 816-271-3100
St. Louis: 636-441-4554
Ozark/West Plains: 417-256-7161

SUBSCRIPTIONS

Phone: 573-522-4115, ext. 3856 or 3249
Address: Circulation, PO Box 180, Jefferson City 65102-0180
E-mail: Subscriptions@mdc.mo.gov
Conservationist online services: Subscribe to the magazine, update your mailing address, or sign up to receive an e-mail when the latest issue is available online at www.MissouriConservation.org/15287
Cost of subscriptions: Free to Missouri households
Out of State \$7 per year
Out of Country \$10 per year

OMBUDSMAN QUESTIONS

Phone: 573-522-4115, ext. 3848
Address: Ombudsman, PO Box 180,
Jefferson City 65102-0180
E-mail: Ombudsman@mdc.mo.gov

EDITORIAL COMMENTS

Phone: 573-522-4115, ext. 3245 or 3847
Address: Magazine Editor, PO Box 180,
Jefferson City 65102-0180
E-mail: Magazine@mdc.mo.gov

READER PHOTO SUBMISSIONS

Address: *Missouri Conservationist*, Reader Photo,
PO Box 180, Jefferson City 65102-0180
E-mail: Readerphoto@mdc.mo.gov



Reader Photo HALLOWEEN IN SPRING

Darla Smith captured this image of a female Halloween pennant dragonfly in an alfalfa field near her house in Kirksville. Smith had taken up photography only seven months before taking this photo. Now, says Smith: "I often spend hours on our 52-acre farm waiting for moments like this. I am definitely an outdoors girl. I grew up around hunting and fishing and still enjoy it to this day with my husband and children."



ASK THE OMBUDSMAN

Q: I've been seeing a dove in my bird-feeding area that is different from the typical mourning doves. It is larger and has a black band around the back of its neck. Can you tell me what bird it is?

A: That is most likely a Eurasian collared dove (*Streptopelia decaocto*). It was first reported from Missouri (Marion County) in 1998 and has spread rapidly throughout the state since then. The only other possibility of a dove with a black band on the neck is the ringed turtle-dove, which is sold in pet stores and occasionally escapes from captivity. The Eurasian collared dove is now a statewide permanent resident and is becoming relatively common in many towns.

The Eurasian collared dove is larger and grayer-colored than the mourning dove and has a tail that is squared-off at

the tip. They nest in trees and feed on grain, often around areas of human habitation. They are not distinguished from mourning doves for purposes of daily and possession limits during dove season.



Eurasian collared dove

Ombudsman Tim Smith will respond to your questions, suggestions or complaints concerning Department of Conservation programs. Write him at PO Box 180, Jefferson City, MO 65102-0180, call him at 573-522-4115, ext. 3848, or e-mail him at Ombudsman@mdc.mo.gov.

Youth Turkey Hunt

Then youths from throughout Missouri participated in the state's first Governor's Invitational Youth Turkey Hunt held April 4 and 5. The event was sponsored by the Missouri Legislative Sportsmen's Caucus, the Conservation Federation of Missouri and the National Wild Turkey Federation. The Conservation Department hosted turkey-hunting seminars on Friday and Saturday afternoons, and Conservation staff and volunteers guided the hunts. Weekend activities included a dinner at the Capitol with Gov. Jay Nixon.

Overall, the 2009 youth-season harvest was down slightly with 2,883 birds checked, compared to 2,898 in 2008. Top harvest counties were: Franklin with 96, Osage with 85 and Polk with 61. Franklin County broke its previous record of 94 set in 2007. The Conservation Department issued permits to 19,135 Missouri turkey hunters age 15 and under this year, down from 21,595 in 2008.



Pictured front row, L-R: Cade Pendergraft, Levi Chew, Thomas Copeland, Chris Payeur, Charlie Boschert, Jack Boschert, Morgan Robb, Tori McAfee and Laura Richards. Back row, L-R: Garrett Jazenboski, Senator Frank Barnitz (Lake Spring), Representative J.C. Kuessner (Emmence), Governor Jay Nixon, CFM Executive Director Dave Murphy, MDC Assistant Director Bob Ziehmer.

The regular spring turkey season runs through May 10. More information can be obtained at your nearest Missouri Department of Conservation office or online at www.MissouriConservation.org/793.



Species of Concern

Pink Mucket



Species of Concern: Pink mucket

Scientific name: *Lampsilis abrupta*

Distribution: Meramec, Big Bourbeuse, Gasconade, Black and Little Black rivers

Classification: State and federally endangered

To learn more about endangered species: www.MissouriConservation.org/8227

HISTORICALLY KNOWN FROM 25 rivers and their tributaries nationwide, the pink mucket mussel was down to 16 rivers by 1990. In Missouri, this species has all but disappeared from the Big, St. Francis and Little Black rivers. Populations remain in the Meramec, Gasconade, Black and Osage rivers. This species probably never was as abundant as some other mussels, but it thrived in deep areas of large rivers. The greatest threats to its survival are damming, dredging and channelization, all of which destroy or degrade its habitat. Pollution, illegal harvest and mud washing into streams also hamper the pink mucket's survival. You can help this and other native mussel species by reporting mussel poaching and preserving healthy stream corridors and watersheds. Forest and other streamside vegetation reduces siltation, which can smother mussels under a blanket of mud. The Conservation Department has information and incentives to help private landowners maintain healthy stream corridors. For more information about stream stewardship, visit www.MissouriConservation.org/n175.

PHOTO: SCOTT FAIMAN; ART: MARK RAITHEL

Jiminy Cricket Frog

"Gik-gik-gik" calls continue into summer.

One of Missouri's most common but least-known amphibians is the Northern cricket frog (*Acris crepitans*).

Found throughout Missouri, these frogs sometimes are mistaken for baby toads because of their size — less than 1.5 inches — and warty skin. They are more comfortable on land than water, and they don't climb like tree frogs. They breed from late April through mid-July, but the "gik-gik-gik" calls of males can be heard at night from late April through July.



Confirmed Sightings Still Rare

Every mountain lion report is taken seriously.

Evidence strongly indicates that any mountain lions that might show up in Missouri are most likely transients that could come from Texas, South Dakota, Wyoming or Colorado, rather than from an established, reproducing population. Of more than 1,300 sightings reported to the Mountain Lion Response Team since 1996 only 10 have yielded enough physical evidence to be verified. These included five that were photographed or videotaped, two that were killed by vehicles, one shot illegally and two confirmed by tracks, prey kills or other physical evidence. Unconfirmed reports often involve bobcats, dog tracks or livestock injuries from free-running dogs. If you see a mountain lion, call the nearest Conservation Department office immediately or e-mail mountain.lion@mdc.mo.gov. Try to preserve or photograph tracks or other physical evidence. For more information about mountain lions in Missouri, visit www.MissouriConservation.org/8340.





Down the Lazy River

Rediscover Missouri's namesake river.

The 500-mile Lewis & Clark Water Trail Web site provides all the information you need to explore the Mighty Missouri River. Access points from the Iowa state line to St. Louis allow you to choose from floats of an hour to a month. One of the most scenic trips is the 25 miles from Taylor's Landing, across the river from Rocheport, to the Hartsburg Access. This stretch has two commercial campgrounds and a full-service marina. For detailed on-the-ground information and contacts for canoe-rental service, visit www.missouririverwatertrail.org.



strong fighters, making them perfect for new anglers. Often, CAP lakes have facilities including paths, privies, fishing jetties and covered, wheelchair-accessible fishing docks. Fish-attracting structures placed around docks and jetties help ensure that anglers find fish. These facilities are ideal for families. To locate a fishing spot near you, visit www.MissouriConservation.org/7267. For information about how to catch bluegill, visit www.MissouriConservation.org/4171.

Fishing For Fun at CAP Lakes

Spring is perfect for catching bluegills and redears.

Fishing close to you — that's the idea behind the Community Assistance Program. Through CAP, the Conservation Department helps more than 100 partners — mostly cities — provide recreational fishing opportunities at more than 200 lakes and streams in 67 counties. Among the biggest benefits to CAP partners are fish stocking to establish fish populations and management to maintain quality fishing. At this time of year, that translates into great fishing for bluegill and redear sunfish. Sunfish are ready biters and

Trail Guide



EXPLORING NATURE IN KANSAS CITY



LOCATED ON THE southwest corner of 47th and Troost, the Discovery Center is a great place to experience nature. Besides exhibits and the opportunity to see native plants and animals outdoors, you can take in educational

and entertaining programs. This month's programs include:

- Amazing Amphibians, May 2 — Learn how frogs, newts and salamanders live in two worlds.
- Exploring the Missouri Prairie, May 9 — Hear a presentation on the state listed endangered prairie chicken and learn how its fate is tied to Missouri's grasslands.
- A Forest of Fashion, May 16 — Decorate yourself with a "tree cookie" necklace and discover the secrets it contains. Use various shaped leaves to create a unique T-shirt.
- SSSSSNAKES! May 23 — Get up close and personal with a live snake and learn their importance in the wild.

Area name: Anita B. Gorman Conservation Discovery Center

Trails: East-West Walkway and Wild Sidewalk

Unique features: Wheelchair-accessible trails, bird and water gardens, postage-stamp prairie, woodland, wetland.

For more information: Call 816-759-7300 or visit

www.MissouriConservation.org/2303



TAKING ACTION

Meramec Hills Master Naturalists



Group Featured: Meramec Hills Chapter of the Missouri Master Naturalists

Group Mission: The Missouri Master Naturalist™ program mission is to engage Missourians in the stewardship of our state's natural resources through science-based education and volunteer community service. It is sponsored jointly by the Department of Conservation and the University of Missouri Extension.

Learn More: Visit extension.missouri.edu/masternaturalist or call 573-522-4115 ext. 3370

CAROL MAHAN RETURNED from the Arbor Day Farm's Nature Explore Classroom in Nebraska City inspired. As manager of the Bray Conservation Area in Rolla and advisor to the Meramec Hills Chapter of the Missouri Master Naturalists, that inspiration was quickly magnified and developed into multiple new projects. The Meramec Hills MNs, led by Bob and Pat Perry and supervised by the area naturalist, Connie Schmiedeskamp, helped Carol develop four Pre-School Zones that encourage exploration with nature and art (Creative Zone), movement (Action Zone), scientific discovery (Discovery Zone) and building with nature materials (Construction Zone). They also created a Wildlife Track Trail with signs that ask "Who was here?", erected trail signs for tree identification, helped with a brochure for a self-guided tree hike, and built a Trees — Inside and Out exhibit. They also maintain the area's trails. "Our membership consists of people who are passionate about nature and willing to give many hours to making sure the next generation shares our enthusiasm," says Chapter President Kathy Walker.

Primitive Accommodations

Conservation areas offer back-to-basics camping.

Sometimes a campground is just a little too ... civilized. Campers looking for more challenge and fewer amenities should check out the camping options at conservation areas throughout Missouri.

Conservation areas may offer either "Designated" or "Open" camping, and their level of development varies.

Designated areas are maintained for camping, and may be either "Designated Primitive" or "Designated Improved." Designated Primitive sites offer a general camping area, while Designated Improved sites have individual campsites. Designated areas may include picnic tables or grills, and some have restrooms.

Open camping areas offer the most primitive experience. There are no designated camping sites or water sources, and no developed facilities. The primary rule for open camping is that campsites must be at least 100 yards from parking lots and roads. However, campers are encouraged to follow "Leave No Trace" principles, which include: plan ahead and prepare, travel and camp on durable surfaces, dispose of waste properly, and leave what you find. Learn more about Leave No Trace at www.LNT.org or by calling, toll-free, 800-332-4100.

There is no charge, and reservations are not required to camp at conservation areas, but they are seldom crowded.

The exception is during some hunting seasons. Campers should check with individual conservation areas in regard to regulations and camping access.

You can learn more about conservation areas and camping through our online atlas at www.MissouriConservation.org/2930 or by calling your Regional office (phone numbers on Page 3).





A Leisurely Troll

Snag-free angling for panfish and an occasional lunker.

Missouri has no natural lakes, but it has oodles of impoundments. The difference is that the latter have dams that hold in the water. Along these dams you'll find deep water and plenty of fish.

The dams make good starting points for anglers on both big and small lakes, especially on unfamiliar waters. A proven technique is to drag tiny tube jigs in open water along the dam face.

Electric motors are best because they are quiet and can move the boat at low speed. Cast and release enough line so that the 1/16-to 1/8-ounce jigs trail around 30 to 40 feet behind the boat. The depth the lures run can be critical so experiment with different speeds and jig weights. If you have a GPS unit, a good speed to start trolling is about .7 miles per hour.

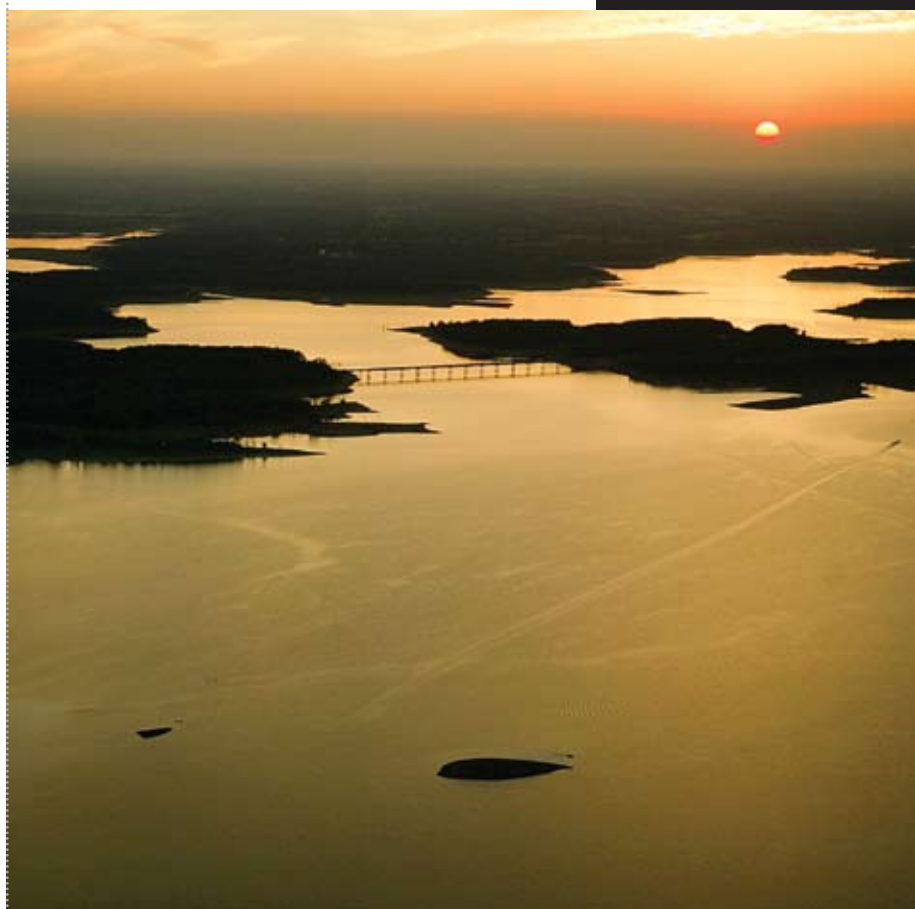
Use rod holders to spread your lure pattern behind the boat. Make runs at various distances away from the dam until you find the most productive depths and speeds. Also experiment with color. You may experience lots of "tap" bites, but fish that mean business often hook themselves.

Trolling the middle of the water column usually means you'll have little trouble with snags and can learn to avoid places where you repeatedly hang up. Note these places, as well as where you catch nice fish, so you can return and fish them thoroughly.



Mark Twain Lake

Scout it Out



Name: Mark Twain Lake

Location: In Ralls and Monroe counties, 28 miles southwest of Hannibal and 120 miles northwest of St. Louis.

For more info: www.mvs.usace.army.mil/MarkTwain/



ON AN ANGLER'S first visit to one of Missouri's big reservoirs he or she might well wonder, "Where, in all that water, am I going to find good fishing?" Sprawling Mark Twain Lake in Ralls and Monroe counties is a good example of a tough lake to approach for the first time. The lake has great crappie fishing and plenty of Corps of Engineers accesses, but it's almost as if it gives you too many choices. Maps help, and you can get good ones from the Web site shown above, at area bait shops or by calling the Mark Twain Lake Project Office at 573-735-4097. However, the simple strategy described on this page in *A Leisurely Troll* will likely produce good fishing action on your first visit. At the same time it will allow you learn more about the lake.

Slowly drag small lures or baits along the dam and bluff edges, over creek channels and near riprap shorelines with a steep drop-off. The lake has no crappie length limit, and the daily limit is 15. Fisheries Management Biologist Ross Dames reports that Mark Twain contains lots of 8-inch crappie that are growing at a good pace, promising improving fishing through the summer.



Nettles and Jewelweed

Nature presents a prickly problem and a solution.

It's a pleasant coincidence that stinging nettles (*Laportea canadensis*) and jewelweed (*Impatiens spp.*) often grow close to one another. Both plants are fairly common in low, moist woodlands and along streams, and it just happens that the juice of jewelweed is a balm for the toxic effects of the nettles.

If you haven't engaged bare arms or legs with stinging nettles, you have missed out on an intense experience—albeit a bad one. Tiny hairs on the leaves of most species of nettles have sharp terminal ends that penetrate human skin, even through a layer of clothes, and release irritants. You immediately feel burning pain and desire relief. Rinsing the exposed area with water helps, but so can the sap of jewelweed. Break the jewelweed stems and repeatedly apply the abundant juice within to the affected area.

Stinging nettles are about 2–3 feet tall and tend to grow in dense colonies. If you look carefully, you can see the stinging hairs along the stems and ragged-edged leaves. Jewelweed is slightly shorter and its leaves have scalloped edges. When mature, the plant's flower explodes a seed into the air at the slightest touch, giving rise to another common name for the plant: touch-me-not.



Stinging nettles

Bird Songs at Dawn

Wake up early to enjoy the morning melodies of birds.

The greatest symphony in the world may be heard from your deck or patio at dawn. Find a comfortable chair, pour a cup of coffee or tea and listen to what the birds have to say. Birds sing to attract mates or claim territory. In other words, they are either saying "come hither" or "stay away." Their songs seem to travel farther and sound crisper early in the day, especially on still mornings.

A CD called *Missouri Bird Calls* helps you identify 192 state birds by their calls and habitats. The CD costs \$8, plus tax, shipping and handling, where applicable, and is available by calling 877-521-8632 or visiting www.mdcNatureShop.com.

NATIVE BEAUTY

Mayapple

WHAT BETTER NATIVE plant to admire in May than the mayapple (*Podophyllum peltatum*). The plants often poke up in Missouri woodlands as early as March. They typically reach a height of about 18 inches. After they unfold their leaves, which could be up to a foot across, clumps of mayapple suggest crowds of commuters standing beneath umbrellas. Their single white flower, which often appears in May, nods beneath the large leaves. The flowers have a distasteful odor. Only plants with two leaves create a flower. Single leaf mayapple stems produce neither flower nor fruit.

If it's the apple you have your eye on, you'll have to wait. Mayapple fruits don't mature until late summer, and after the leaves have withered. They are not really apples and more resemble small lemons. Technically they are berries, and they are only edible when fully ripe. Some people who have eaten them describe the fruit's taste as "insipid." Others say the apples make great preserves or juice. The rest of the plant, including the seeds of the berry, is poisonous.

It's usually better to admire mayapples in the woods than to plant them in your yard. Colonies of them grow from creeping underground roots and can be disturbingly difficult to control. Learn more about mayapples from the Missouri Botanical Garden's Web site at www.mobot.org.



Mayapple



Stream Team Calendar

Find out what teams are doing all over the state.

If you ever wonder what individual Stream Teams are doing, wonder no more. **MoStreamTeam.org** has a "Calendar" page where you can scan activities planned by Stream Teams around the state. Examples include:

- The Eleven Point River Cleanup Aug. 5 and 6, including camping, hiking and caving. For more information, call 417-270-1008 or e-mail msspaceyriverat@yahoo.com.
- The 65-mile kayak/canoe "Race for the Rivers" Aug. 29–30 from Washington to Columbia Bottom Conservation Area. For more information, e-mail greenwaynetwork@gmail.com, or visit racefortherivers.org.



get a ticket or have to pay a fine if you are caught operating off-road vehicles in inappropriate places. Missouri has public areas set aside especially for ORV riders. These include: Finger Lakes State Park in Boone County, 573-443-5315; St. Joe State Park, 8,238 acres in St. Francois County, 573-431-1069; Sutton Bluff Recreation Area in Reynolds County, 573-729-6656; and Chadwick ATV and Motorcycle Area in Christian County, 417-683-4428.

ORV Abuse

Running all-terrain vehicles in streams can be costly.

It's summer, time to get out into Missouri's beautiful streams. But be sure to keep your vehicle where it belongs . . . out of the water. All-terrain and four-wheel drive vehicles can be great tools for outdoors people. They can be fun, too. However, when driven in or through streams they destroy fish habitat and stir up mud that smothers aquatic life. Off-road vehicles also cause erosion and other serious damage on land when driven where they are prohibited. If that is not reason enough to be responsible when off-roading, consider the possibility that you might

Stream Team



Valley Park Lions Club



THE VALLEY PARK Lions Club traces its involvement in stream conservation to 1981, when it joined Operation Clean Stream. A decade later, they were among the first groups to join Missouri Stream Team.

Members of ST 151 started their career by removing items such as massive heavy-equipment tires and major appliances from the Meramec River. Twenty-eight years later, some Lions have shifted their efforts to less strenuous work, providing food and logistical support for those who perform grunt labor in the grandfather of all stream cleanups. Team member Joe Schulte says his club also has been instrumental in recruitment. One challenge is getting young people involved, so the Valley Park Lions work with Scouts. They also have gotten other Lions Club chapters into Missouri Stream Team. "The Lions were doing this before it was politically correct," says Schulte. "We did it because of our love for the river."

Stream Team Number: 151

Date formed: June 1, 1990

Location: Meramec River

For more info about Stream Teams: www.MoStreamTeam.org



Our Glorious Forests

SPRING CREEK GAP CA



Spiderwort (purple) and Missouri bladderpod (yellow)

Size: 1,819 acres

Location: 4 miles north of Vichy on Old Highway 63

Habitat types: This area is mostly forest and woodland.

Facilities and features: Primitive camping, picnic area and Spring Creek Gap Glades Natural Area.

Find more info: www.MissouriConservation.org/a4644



FOR A THRILLING show of woodland wildflowers and wildlife, head to Spring Creek Gap Conservation Area in Maries County this month. The area's steep dolomite glades (dry, rocky exposed areas) and forested ravines will be aflutter with wildflowers, butterflies and birds. Within the area, Spring Creek Gap Glades Natural Area features numerous glades, ranging in size from less than 1 acre to more than 10 acres. The majority of the forest is made up of oak and hickory. Visitors will notice evidence of prescribed fire, one of the primary tools area managers use to improve wildlife habitat and glade/woodland health. Although there are no designated trails, visitors will find good hiking on area access trails. Be sure to take a field guide to help you identify the many plants and animals that depend on the area for habitat.

Community Tree Care Grants

Applications for funding are due June 1.

Cooling shade and leaves that help generate the air we breathe are among the many reasons for communities to care for their forests. Get the funds to enhance or help start a tree-care project on public lands in your community from the Tree Resource Improvement and Maintenance (TRIM) program. This cost-share program is administered by the Missouri Department of Conservation in cooperation with the Missouri Community Forest Council. Deadline for application is June 1. Download the application at www.MissouriConservation.org/7367.



Don't Move Firewood!

This one precaution can help protect Missouri's ash trees.

THE non-native emerald ash borer, a shiny green beetle was discovered at Wappapello Lake last July. It hides and travels in firewood, and it probably arrived at the lake's campground in an unsuspecting camper's bundle of firewood. To help contain Missouri's emerald ash borer infestation, cut or buy firewood from local sources, and use it as close to its point of origin as possible. "If people knew how devastating this insect can be, they would never consider bringing firewood from out of state," said MDC Forest Entomologist Rob Lawrence. You can learn more about how to control the spread of emerald ash borer at www.MissouriConservation.org/10985.





Give Quail Chicks a Chance

Leave unharvested strips along hayfield edges.

If you enjoy quail and other grassland birds, leave an unharvested strip of grass along your hay fields throughout the summer.

Although grassland birds nest several times during the breeding season, they're not always successful with their first attempt. Leaving a little nesting cover gives later broods a chance



to fledge. In return, they'll give you better hunting in the fall. For more tips on managing your property's wildlife habitat, visit www.MissouriConservation.org/16287.

Bradford Farm Field Day

Native plants work for farm profits and wildlife.

Learn how to use Missouri's native plants to improve farm productivity, beautify your landscape and restore quail habitat on June 18. The University of Missouri Bradford Research and Extension Center's annual Bobwhite Quail/Native Plant Field Day will be from 4 to 8 p.m. See how native grasses can benefit your farm's livestock forage and wildlife habitat. Visit a rain garden, where beautiful native grasses and wildflowers turn runoff into a haven for birds and butterflies. Wagon tours will take you by demonstrations that integrate quail habitat management with successful farming practices. Several University of Missouri and Lincoln



University experts will be on-hand to answer questions, and native plants will be for sale. Bradford Farm is just southeast of Columbia. For directions and more

information, call 573-884-7945.

Neighbors Helping Quail Habitat

On the Ground



Don Simpson (left) and Bob Riley

BOB RILEY AND Don Simpson aren't exactly neighbors—their Monroe County properties lie several miles apart. But both are sold on taking a "neighborhood approach" to managing quail habitat. The 12,000-acre Paris Quail Focus Area, which includes their farms, helps them do this. Don is proud that his 1,150-acre property serves as a demonstration site. "It's a good way to share ideas and show how to bring back quail," he said.

Several miles to the northeast, Bob manages his 140-acres almost exclusively for wildlife. "We've gotten a lot of help from the Department," he said.

Both Bob and Don hope more neighbors get involved in their Paris Quail Focus Area. "It would sure be nice to get participation that would actually connect our places with good quality habitat," Bob said. To see if your land sits on one of Missouri's 34 private land quail focus areas, contact your Regional office (Page 3).



Native Landscaping

Book gets new species and maintenance info.

Native Landscaping for Wildlife and People, Missouri's guide to using native Midwestern plants to beautify your property and benefit wildlife, has been a Nature Shop favorite since 2002. This year author Dave Tylka made several improvements to his original effort. The book's tables now include more information on the care and maintenance of native plant species, as well as details on the unique and distinctive characteristics of some of the more colorful species of native butterflies. Dave also replaced some hard-to-obtain native plant species with those that are more widely available from Missouri's native plant nurseries. Overall, this year's updated and improved edition is more user-friendly than the 2002 version. You can purchase the 2009 edition for \$18 plus shipping and handling and sales tax (where applicable) at any MDC Nature Shop. To order, call toll-free 877-521-8632 or visit www.mdcNatureShop.com.



Teacher Workshops

Register now for this summer's courses.

If you're pursuing an education degree or want to enrich your teaching, consider signing up for a conservation educator's workshop. You can get undergraduate or graduate credit hours for many of the workshops, several of which also serve as Category 1 Instructional Workshops for the Missouri Environmental Education Certification Program. Cross-curricular workshops address Pre-K through high school educators' needs, and most workshops align with Department of Elementary and Secondary Education Grade Level Expectations. Check www.MissouriConservation.org/8822 for dates, locations and registration information.

NATURE ACTIVITY



NATURE ACTIVITY: NOPPADOL PAOTHONG

Habitat Days at Columbia Bottom



COLUMBIA BOTTOM'S "Habitat Days" program is a kids-only adventure, where a habitat-a-day keeps summer boredom away. The program's three-day exploration of the area's habitat mosaic starts with

an experience of the peaceful prairie on day one. Day two gives kids a chance to take a fascinating look at forests. Participants will spend day three diving into awesome aquatics and wetlands. The program's hands-on activities include field investigations, crafts, arts and keeping a nature journal. Participants will also enjoy riding around the area on a straw bale-lined flatbed trailer pulled by a tractor. Parents must register children for all three days, and send a sack lunch per child each day. To find more information about Columbia Bottom, including other events, maps, area hours, directions and area features, visit www.MissouriConservation.org/2612.

Where: North St. Louis County at the confluence of the Missouri and Mississippi rivers

When: June 17 to June 19, 10 a.m. to 2 p.m.

Who should come: Kids ages 8–12

To register: Call 314-877-6014 from May 20 through June 10.



MAY DAY *on the* FINLEY

A floater's-eye view of spring

by LORING BULLARD,
photos by DAVID STONNER



Taking a float trip in the spring allows you to witness the awakening of a river's inhabitants, such as this zebra swallowtail butterfly.

May just might be the perfect month to float an Ozark stream. Swollen by spring rains, the rivers are flowing strong but clear, hurrying downstream with seeming urgency. Rapidly greening woods are speckled with white flowering dogwoods, and tawny brown gravel bars sport butterfly-enticing blue stars. Tender vines and shoots stretch out, but a person can still navigate loamy banks in places where he or she wouldn't try to go through the brambles of June. Countless newly emerged flying insects buzz and whine and rise in ecstatic, vibrating clouds. To this awakening of the invertebrate hordes, fish are inevitably drawn—the aquatic rite of spring. As the stream warms, its finned inhabitants become hungry and active, swirling toward the surface at the ripples of a downed mayfly.

AWAKENING

Like its counterparts around the Ozarks, the Finley River comes alive in May. In order to witness this awakening—to be swept up in it—my friend Jud and I float and fish the Finley. Higher water allows us to launch our canoe on the upper, more rural part of the river. In its lower stretches, the stream wanders precari-

ously close to sprawling suburbia, but the upper section retains a wild feel and good water quality, reflecting a watershed still mostly forest and pasture. Fish on our lines are likely, sometimes noteworthy, but not absolutely necessary—not in May. In May, being on the river is enough.

MOMENTUM

A major tributary of the James River, the Finley runs swiftly in narrow channels over gravel and cobbles and sometimes over smooth bedrock. In places, it pauses in deep blue pools beneath gray, pancake-layered limestone bluffs. As it flows toward its meeting with the James River, it picks up water from a series of small, spring-fed tributaries—Terrell Branch, Stewart Creek, Squaw Run Creek, Pedelo Creek, Parched Corn Hollow; and springs—Otto Lasley and Olie Lasley springs and water trickling from the huge, yawning mouth of Smallin Cave.

Like most rivers, the Finley rises from humble beginnings—in this case, a few tiny, gravel-choked channels draining a broad, gently sloping plateau near Cedar Gap in southeastern Webster County. At 1,640 feet of elevation, the top of this nearly flat watershed divide is only 130 feet lower than Taum Sauk Mountain, the highest point in the state. Off the steep edges of this elevated lobe of land, headwater streams of the Gasconade River, Bryant Creek and Beaver Creek radiate to the north, east and south. Trains traveling westward from the interior Ozarks chug up the abrupt escarpment past Lead Hill, through the Cedar Gap, and into the westward-flowing, low-gradient headwaters of the Finley.

Forty miles downstream, the Finley meets the James. On his tour of the Ozarks in the winter of 1818–1819, Henry Rowe Schoolcraft lingered on a magnificent promontory overlooking this confluence, pronouncing it an ideal site for a town. He claimed that the beautiful, clear stream flowing below him got its name from a local beaver trapper—a man named Findley (So, you might ask, why isn't it called the "Findley?"—good question).

AMBITIONS

Jud and I usually spend a long day on the upper Finley. Having floated this section of stream many times, we know about how long the trip





Floaters on the Finley River get an up-close and personal peek into the river's complex personality.



Yellow crowned night heron

should take. We know that if the fishing is good, we will most likely paddle furiously the last few miles to get off the river before dark. If the action is light, we will fish only the high percentage spots. For the most part, we stay with the tried and true—brown curly tailed jigs, spinnerbaits, plastic crawdads. Later, in the summer or fall, we will angle for the flashy and exciting top water strike, but now, in the warming spring, the red-eyed fighters must be lured from their deep eddies and hidey holes.

We enjoy catching fish, but fishing is only a narrow sliver of the experience. The river itself holds our attention. Jud, a dedicated naturalist, points out the movements, sounds and interactions of a variety of creatures, both in and out of the water. In the depths of winter, we talked about—longed for—a vibrant, fully awakened spring day on the Finley. Now, at long last on the water, we are hard-pressed to say what we find more enjoyable—the warm sun on our backs, or the melodious bird songs rising from the thickening foliage. The exact nature of the allure is hard to pin down, but its shorthand expression is easy—we love the river.

CELEBRATIONS

Floaters enjoy a front row seat, getting an up-close and personal peek into the river's complex personality, unfolding mile after mile. There is something new and interesting around each bend. Myriad creatures lurk and move in the ribbon of lush vegetation near the stream, a zone of ecological significance far out of proportion to its physical extent. Human bonds with the natural world can be sensed strongly here.

Jud and I feel this attraction, though we don't try to put it into words. We just enjoy being on the river, even when the fishing lags. We linger on a gravel bar, reclining on the crunchy gravel with life jackets for pillows, our outstretched bodies simultaneously warmed by the sun and cooled by the breeze. At times like these, it is easy to forget that there are equally pleasant moments on other rivers and in other seasons.

In the warm afternoon, we put our paddles down and float quietly along, feeling the smooth acceleration, as the canoe is pulled from limpid pool into foaming rapid. In a calm stretch, my rod laid sleepily aside, I become



mesmerized by the miniature whirlpools spinning from our silently drifting boat. Looking up, I marvel at the tenacity of the scraggly cedars hanging for dear life high on the face of a limestone bluff. My mind drifts beyond the boat. But then the voice at the other end of the canoe snaps me to a focus.

“I’ve got one, Bull.”

Jud has successfully set the hook. While I drifted, nearly dozing, he fished. A moment earlier, through the surgical tension of his line, he felt the fish mouth and then take his jig and now he muscles and plays the premier grade of Ozark stream game, the smallmouth bass. The fish jerks and turns and catches the sun, flashing her bronze side from the greenish-blue depths. Jud’s rod tip bends impressively and we know that this fish may be spoken of in years hence. Jud, a broad grin on his face, draws energy from the fish. It helps him—us—feel better, even though, obviously, the fish would rather not participate in the therapy. In spite of that, we do care for the welfare of the fish. We are concerned about all the river’s inhabitants, from hellgrammite to bobcat, liverwort to sycamore. More than adding interest, the diversity of river life tells us that this section of the Finley, at least, is relatively unspoiled.

After a few minutes locked in a time-honored struggle, Jud proudly hoists the 16-inch smallmouth, fat and healthy and curling her tail. He measures, I photograph. Upon release, this solid bundle of muscle torpedoes away at lightning speed, toward the bank and the shadows of floating lily pads. On many trips, we will catch smaller fish and call them good days. On the other hand, the promise of even bigger fish keeps us coming back, faithfully, year after year. An 18-inch smallmouth hauled out of an Ozark creek is a cause for celebration.

That being said, every aspect of our float is a celebration. We frequently remind ourselves how lucky we are to have places like this so close to home. Spending time on the river lightens our loads, which, we readily admit, are already light. On the river, we don’t need to be profound, or witty—we can relax. We laugh at trivial, silly things. We breathe healthy air, tinged with river aromas, but robust and clean. We have no need to impress, but we are easily impressed. A red-tailed hawk circling on the thermals far overhead screeches and we look up, drinking in the sight for some time. Today, on the Finley, away from the maddening traffic and hectic schedules, we have the time. In May, the river has time for us. ▲

Every aspect of our float is a celebration. We remind ourselves how lucky we are to have places like this so close to home.



CALL *BEFORE*



YOU CUT

by STEVE WESTIN, photos by DAVID STONNER

A forester can help you avoid woodland management mistakes that persist for decades.

In order to best assess what you have in your woodlot, have a forester come out and conduct an inventory. Consulting forester Art Suchland (right) discusses the options involved in landowner Dean Klohr's property.

Could you even dream of performing surgery on yourself? Would you undertake legal action without an attorney? How about designing and building a new house without consulting architects or builders? Most folks likely would prefer having professional help, because they know they lack the training and experience to get those jobs done right.

It's a pretty good bet that most landowners would also benefit from expert advice when it comes to managing their woodlands, especially when they are planning a timber harvest.

Caring for your forest is a long-term proposition where one unfortunate decision can have impacts that last for decades.

The Department of Conservation, along with many partners, is launching an information campaign named Call Before You Cut. The program encourages woodland owners to consult with professional foresters or a Professional Timber Harvester or Master Logger before they make decisions about their forestland. A toll-free telephone number (877-564-7483) has

been established through which landowners may request information about caring for their woods and contacting a professional forester or trained logger.

We're also a partner with other states in a Web site (www.callbeforeyucut.com) to tell people about forest management, and to provide people with contact information for foresters.

Many states have laws, generally called "forest practices acts," that control various aspects of logging activity on privately owned lands. In Missouri, we rely on people voluntarily practicing good forest management. Outreach efforts, like Call Before You Cut, provides information that enhances people's knowledge of how to take care of their woods.

83%
of Missouri forests
are privately owned



We think the effort is worthwhile. Missouri forests (83 percent of which are privately owned) provide important benefits to both the people who own them and society in general. Forested lands play a large role in providing clean air, recreational opportunities, wildlife habitat, forest products and clean water for all Missourians.

From decades of research, we've learned that active management enhances the values provided by privately held woodlands. We do everything we can to help people keep our forests healthy.

Getting What You Want

Have you ever thought about what you would most like from your land? This is often the first question a forester asks a landowner when they begin discussing options for woodlands. Are you a hunter? Do you like to photograph birds and other wildlife? Do you just want a peaceful retreat? Do you want to cut some firewood? Would you like your woods to provide periodic income? Are you concerned about maintaining your forest's health?

Once you have a vision of what benefits you would like from your woodlands, you can choose from a variety of management activities that will help you achieve your goals. The good news is that many objectives overlap. A healthy forest provides excellent habitat for animals, is aesthetically pleasing and will produce good wood for heating or wood products.

The next step is assessing what you have in your woodlot. A forester can conduct an overall inventory of your woods to determine the kind and number of trees present, as well as their distribution, health and age. The forester also will identify areas that need special attention, such as bare stream banks or a lack of wildlife habitat.

Once you have determined the goals for your woods and the forester has conducted an inventory, it's time to make a plan. A forest management plan prepared by a professional forester describes the current condition of your woodlands and the trees growing there. It also integrates your objectives with the resources present, spells out activities that will help achieve your goals for your land and can guide you should you decide to harvest some of the timber on your property.

A forester will mark and tally the trees that are to be removed during the sale. This log count



Once you and the forester have identified the harvest area and worked out the details of the sale, it's best to develop a harvest plan. It should specify how the trees are to be marked and removed.



After opening the bids, you and your forester should meet with the logger selected in order to discuss details of the timber sale.

will allow the forester to develop an estimate of the value of your timber based on current market conditions. The pre-harvest inventory is essential. You know the value of your home, vehicle, livestock and crops. Do you know the value of the trees in your woods? Most people don't.

You can then solicit loggers for bids on the trees you want to sell. The bid process is an amazing thing. There are usually wide differences among bids, and the high bid is often as much as double the low bid. Taking the first offer, no matter how much money it sounds like, is usually not the best idea. It just makes good business sense to advertise the timber sale and get several written bids. This can mean more money in your pocket.

Sustainable Harvests

A common method of timber harvesting in Missouri is high-grading. This is unfortunate because this practice removes all the good trees from the woods in one harvest, leaving only those that are in poor condition. Those remaining trees grow slowly and limit the landowner's options for decades. High-grading might lead to more immediate financial gain, but it's at the expense of the forest's future potential and health.

A properly conducted harvest removes trees of all sizes, ages and quality, leaving many desir-

able trees while promoting the growth of high-potential younger trees. A well cared for forest provides sustainable woodlands that increase in quality, health and value over time.

Once you and the forester have identified the harvest area and worked out the details of the sale, it's best to develop a harvest plan. The plan should clearly lay out the location of log landings and their treatment, as well as the location of haul roads and skid trails. It should also specify how the trees are to be cut, and the treatment of the logging slash. A good plan will protect the aesthetics, water quality and soil resources of your woodland.

After opening the bids, you and your forester should meet with the logger selected in order to discuss details of the timber sale. The harvest plan will help guide the logger's activities, but you should make sure that all parties are in agreement about the terms of the sale and how it is to be conducted.

A written contract between the landowner and the logger protects the interests of both parties and is essential to a successful timber sale. The contract should specify how the trees are to be cut, the method and timing of payment, the amount of performance bond and numerous other details, such as defining the sale period and the treatment of damages.

You or the forester should periodically monitor progress and adherence to the contract specifications while the timber harvest is in progress. You want to make sure that living trees that are not part of the sale remain undamaged and that the logger stops working during wet weather so that the equipment doesn't create deep ruts in roads and skid trails.

When the timber harvest is complete, the forester should inspect the harvest area to make sure Best Management Practices to prevent soil erosion have been properly installed, that roads and log landings have been rehabilitated to conditions called for in the contract, and to make sure remaining trees are not damaged.

Receiving your payment from the timber harvest and returning the performance bond concludes the timber sale, but there are often

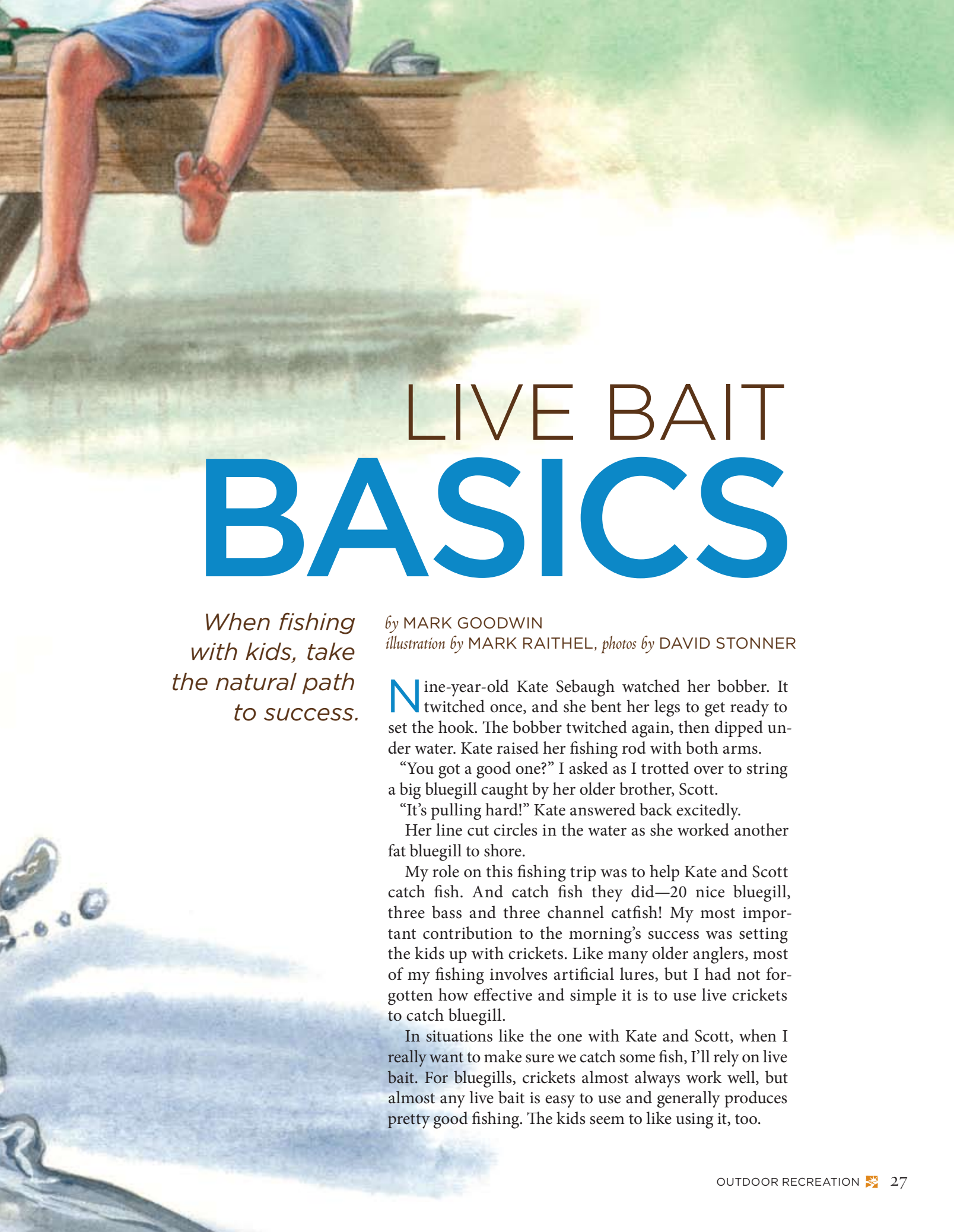
post-sale activities that need to be completed before a timber harvest is truly finished. For example you might need to cut small trees that are not to be a part of the future forest or remove trees damaged during the logging operation. Further work on roads might be necessary, and post-sale is one of the best times to think about improving wildlife habitat.

Managing your woodland can be a rewarding and profitable activity which will enhance its health and productivity, and your enjoyment. A timber harvest can start a new chapter in the history of your woods by removing mature trees, allowing younger trees to grow freely and new trees to start growing. Protect your woodlands for future generations. The best way to begin to manage your forested land is to seek advice from a professional forester. Call Before You Cut! ▲

You or the forester should periodically monitor progress and adherence to the contract specifications while the timber harvest is in progress.







LIVE BAIT BASICS

*When fishing
with kids, take
the natural path
to success.*

by MARK GOODWIN

illustration by MARK RAITHEL, photos by DAVID STONNER

Nine-year-old Kate Sebaugh watched her bobber. It twitched once, and she bent her legs to get ready to set the hook. The bobber twitched again, then dipped under water. Kate raised her fishing rod with both arms.

"You got a good one?" I asked as I trotted over to string a big bluegill caught by her older brother, Scott.

"It's pulling hard!" Kate answered back excitedly.

Her line cut circles in the water as she worked another fat bluegill to shore.

My role on this fishing trip was to help Kate and Scott catch fish. And catch fish they did—20 nice bluegill, three bass and three channel catfish! My most important contribution to the morning's success was setting the kids up with crickets. Like many older anglers, most of my fishing involves artificial lures, but I had not forgotten how effective and simple it is to use live crickets to catch bluegill.

In situations like the one with Kate and Scott, when I really want to make sure we catch some fish, I'll rely on live bait. For bluegills, crickets almost always work well, but almost any live bait is easy to use and generally produces pretty good fishing. The kids seem to like using it, too.



Digging for worms is a fun
and easy way to start your
fishing adventure.

EARTHWORMS

Sifting through piles of leaves in the backyard or digging in soft dirt behind the barn has started many fishing adventures for kids. Worms are also readily available at bait shops. Pin small worms or thread pieces of larger worms on a hook. Both really work!

I like to use night crawlers, which are really just very large worms. They're fun to collect, too. You can gather them from mown lawns in many places by searching at night with a flashlight after a heavy rain. The rain allows earthworms to come to the surface to feed and breed without the threat of drying out. You can also collect night crawlers in creek or stream floodplains by poking around in the moist piles of decaying leaves and other plant material left by high water at the base of trees and shrubs.

Night crawlers have tough skin, which is another reason anglers favor them. Hooked through the head region, the shorter of the two areas separated by the band, the worms hold well to the hook. You can also hook worms and night crawlers through the more fragile tail section. This encourages them to swim or crawl away from the hook, which adds an enticing action to the bait.

Fishing with worms is simple. You can suspend them beneath a bobber or fish them on the bottom by adding a small sinker or two to your line.

CRAYFISH

Crayfish are an ideal bait for fishing in rivers and streams. They comprise much of the diet of Ozark stream game fish, including smallmouth bass and goggle-eye.

The problem with crayfish is their pincers, which look formidable when crayfish raise them in a threatening manner. They won't hesitate to use them, either. The pinch they deliver, however, is not that painful and seldom breaks the skin. If you pick them up from behind and grasp their upper body between your thumb and forefinger, they'll be unable to pinch you.

Often, the best way to catch crayfish in clear creeks and streams is to turn over rocks and grab them, or you can use a small hand net to avoid being pinched. Usually it's best to divert the crayfish with one hand, while trying to capture it with your hand or the net. Kids love to catch crayfish almost as much as they like fishing with them.

The best way to present crayfish is tight-lining with no bobber. Depending on current, a sinker or two may be needed to hold your crayfish where you want it. Hook a crayfish through the lower edge of the tail so that the hook point faces up. Your first cast with a crayfish often offers your best chance of catching a fish, for the crayfish is fresh and more likely to swim, triggering fish to strike.

You can keep crayfish healthy by storing them in a cool

Live Bait and the Wildlife Code



Below is an excerpt on live bait regulations. You can pick up a copy of *A Summary of Missouri Fishing Regulations* at permit vendors or download a PDF at www.MissouriConservation.org/2115.

• **Live bait includes:** crayfish, freshwater shrimp, southern leopard frogs, plains leopard frogs, cricket frogs and nongame fish. Bullfrogs and green frogs must be taken under season limits and methods listed in the *Summary of Fishing Regulations*.

• **Methods:** Live bait may be taken by trap, dip net, throw net, pole and line or seine. Live-bait traps must have a throat opening not more than 1½ inches in any dimension, and must be labeled with your full name and address. Traps must be removed if they cannot be checked at least once every 24 hours. Seines must not be more than 20 feet long and 4 feet deep, with a mesh of not more than ½ inch bar measure. Live bait, except fish, may be taken by hand. Crayfish also may be taken by trap with an opening not to exceed 1½ inches by 18 inches.

—All bluegill, green sunfish and bullheads more than 5 inches long and other species of nongame fish more than 12 inches long must be returned to the water immediately after being caught by any of the methods listed above except pole and line. The daily limits for nongame fish apply to the large fish taken by pole and line.

—Bighead carp and silver carp may not be used as live bait but may be used as dead or cut bait.

—There is no length limit on bighead carp, common carp, gizzard shad, goldfish, grass carp and silver carp when used as bait.

—Live bait taken from public waters of Missouri may not be sold or transported from the state.

• **Seasons:** Live bait may be taken throughout the year.

• **Daily Limit:** The daily limit is 150 combined total for crayfish, freshwater shrimp and nongame fish. The daily limit is 5 each of the following amphibians: southern leopard frog, plains leopard frog and cricket frog. The daily limit is 8 bullfrogs or green frogs, combined total of both species. Bullfrogs and green frogs may be taken only from sunset June 30 through Oct. 31 (Check the *Summary of Fishing Regulations* for details). There is no daily limit on bighead carp, common carp, goldfish, grass carp and silver carp. Live bait, when purchased or obtained from a source other than the waters of the state or a licensed commercial fisherman, must be species on the Approved Aquatic Species List and may be possessed in any number as long as you carry a dated receipt for the fish.

• **Other species that may be used as bait include:** Nongame fish of any size, except bowfin, if taken according to the methods and seasons listed in the *Summary of Fishing Regulations*. Mussels and clams legally taken by sport fish methods.

* **Game fish or their parts may NOT be used as bait.**

place. A bait bucket with an inch or two of water and a generous supply of tall grass works for me. The grass allows the crayfish to crawl in and out of the water. If left in standing water, crayfish will deplete the oxygen and suffocate.

CRICKETS/GRASSHOPPERS

I've become good friends with one of the farmers on whose ground I turkey hunt. A few years back he invited me to come out and fish with him at one of his ponds. When I pulled up, he was swishing a homemade net to capture grasshoppers from the tall grass by the barn. He placed them in a coffee can with a lid. We then hopped on his tractor and headed to his back pond.

I fished with 1/16th-ounce horse-head jigs, fitted with a spinner and rubber skirt. He used grasshoppers—and caught four fish to my one.

"Country boys and country ways are sometimes tough to beat," he told me later.

Both grasshoppers and crickets will catch most any game fish in Missouri. In early spring, young grasshoppers, recently hatched from eggs laid during fall, are not large enough for fishing, so I'll use crickets, which I usually buy at a bait shop.

Both crickets and grasshoppers can be fished beneath a bobber or by tight-lining on the bottom with a sinker or two. With a bobber, cast toward likely cover, let the bobber settle for several moments, then begin a slow retrieve. If fish are around, they'll usually strike.

Tight-lining on the bottom typically works best when midsummer heat drives fish to deeper, cooler water. When tight-lining, let the cricket or grasshopper sit in one place, or slowly reel it in. This tight-lining technique is a good way to catch red-ear sunfish and channel catfish, which tend to feed close to the bottom.

Both crickets and grasshoppers can be kept in commercial cricket baskets. Store them in a cool place. Put a potato slice into the container and don't overcrowd them. With good care, they should last several days.

Avoiding Injury to Game Fish

Live bait has one drawback: Fish sometimes "swallow" the bait, and the hook lodges deep in the fish's throat or gills. This is no problem unless you want to release a fish; usually it's too injured to survive. Use forceps or needle-nosed pliers to gently remove hooks. If the hook is beyond reach, cut the line. There's a good chance the hook will eventually work itself out. You can usually avoid having fish swallow the bait by setting the hook the moment you feel or see a strike.

DON'T DUMP BAIT!

It's illegal to dump bait in Missouri waters.

Throw unused bait in the trash. Unwanted animals and plants can invade local water, damage habitat and ruin your fishing. To learn more about protecting Missouri's streams, rivers and lakes from invasive species, visit www.MissouriConservation.org/8228.

MINNOWS

Minnows are a "natural" for most game fish. The most common minnow sold in bait shops in Missouri is the golden shiner. These hardy minnows work well as bait.

You can catch your own minnows in a seine or a minnow trap. Larger seines require two people, one for each pole. They are best used going downstream, with one person stopping and anchoring one seine pole at stream's edge with the other person swinging the other end around, encircling the minnows.

Some seines are small enough for one person to use. Hold the seine poles in front of you, with the poles touching the stream bottom, then pull it upstream while kicking and shuffling the gravel with your feet. The seine captures minnows, along with invertebrates, that head downstream to escape the ruckus.

Use these seines at the head of holes where water tapers down to riffles so that you can corral the minnows. Through trial and error, you'll quickly learn a lot about capturing minnows.

Commercial minnow traps and jug traps also are effective. I like to use a Mason jar equipped with a plastic funnel and baited with a few finely crushed saltine crackers. I fill the jar with stream water and face the funnel opening downstream. Minnows follow the fine stream of crumbs into the jar and can't easily exit through the small funnel hole. Sometimes a jar will fill up with minnows in less than 10 minutes.

Some anglers hook minnows through the lips; others hook them behind the dorsal fin. Either way works fine, but I've found it's usually best to hook them in a way that keeps the minnow alive. Suspend minnows from a bobber or jig them around structure. On streams, anglers typically tight-line on the bottom with sinkers or let minnows drift free in the current with no weight.

NON-GAME PANFISH

The best way to catch these is with hook and line baited with crickets or worms. Small panfish are great bait for catching big catfish—particularly flatheads.

Flathead catfish are the connoisseurs of the catfish family, eating only live or freshly killed prey. Trotlines or limb lines, baited at dusk with live sunfish hooked behind the dorsal fin, are an effective means of connecting with these whiskered giants.

If you catch more—or larger—panfish than you need

for bait, you can fillet and fry them. Even the small ones yield small but delicious fillets. Turn the fillets into poor-man's shrimp by boiling them for 3 to 4 minutes in water seasoned with shrimp seasoning, then chilling them in ice water. Served on a bed of lettuce with cocktail sauce, the fillets are quite tasty. ▲

Live bait makes fishing easy and fun. Kids love it, too!



Hunting and Fishing Calendar

FISHING

	OPEN	CLOSE
Black Bass (certain Ozark streams, see the <i>Wildlife Code</i>)	5/23/08	2/28/09
impoundments and other streams year-round		
Bullfrogs and Green Frogs	Sunset	Midnight
	6/30/09	10/31/09
Nongame Fish Snagging	3/15/09	5/15/09
Paddlefish	3/15/09	4/30/09
Paddlefish on the Mississippi River	3/15/09	5/15/09
Trout Parks	3/1/09	10/31/09

HUNTING

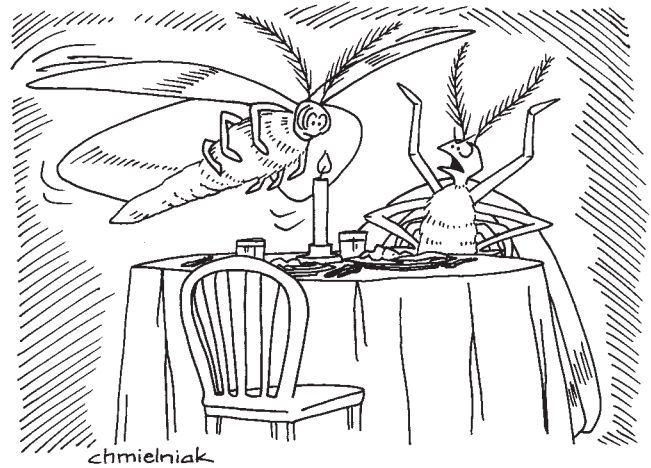
	OPEN	CLOSE
Coyotes	5/12/08	3/31/09
Deer		
Firearms		
Urban	10/9/09	10/12/09
Youth	10/31/09	11/1/09
	1/2/10	1/3/10
November	11/14/09	11/24/09
Antlerless	11/25/09	12/6/09
Muzzleloader	12/19/09	12/29/09
Groundhog	5/11/09	12/15/09
Light Goose Conservation Order	1/31/09	4/30/09
please see the backcover of the <i>Waterfowl Hunting Digest</i> or download the PDF at www.MissouriConservation.org/777		
Squirrels	5/24/08	2/15/09
Turkey		
Youth (resident only)	4/4/09	4/5/09
Spring	4/20/09	5/10/09
Fall	10/1/09	10/31/09

TRAPPING

	OPEN	CLOSE
Beaver and Nutria	11/15/08	3/31/09
Otters and Muskrats	11/15/08	see <i>Wildlife Code</i>

For complete information about seasons, limits, methods and restrictions, consult the *Wildlife Code* and the current summaries of *Missouri Hunting and Trapping Regulations* and *Missouri Fishing Regulations*, the *Fall Deer and Turkey Hunting Regulations and Information*, the *Waterfowl Hunting Digest* and the *Migratory Bird Hunting Digest*. For more information visit www.MissouriConservation.org/8707 or permit vendors.

The Department of Conservation's computerized point-of-sale system allows you to purchase or replace your permits through local vendors or by phone. The toll-free number is 800-392-4115. Allow 10 days for delivery of telephone purchases. To purchase permits online go to www.wildlifelicenses.com/mo/.



"For heaven's sake, Milton, quit flitting around before you burn yourself and spoil our nice dinner."

Contributors



LORING BULLARD has served as executive director of the Watershed Committee of the Ozarks since 1989. The Committee is a not-for-profit, citizen-based organization whose mission is to protect sources of drinking water for the city of Springfield and Greene County. Loring enjoys canoeing, camping, fishing, biking and writing.

MARK GOODWIN is a lifelong Missouri resident and outdoor enthusiast. He best enjoys introducing kids to the fun of hunting and fishing. "To introduce a kid to fishing," Mark says, "there's no better way than using live bait over an active bluegill bed." Aside from the outdoors, Mark enjoys reading and cooking.

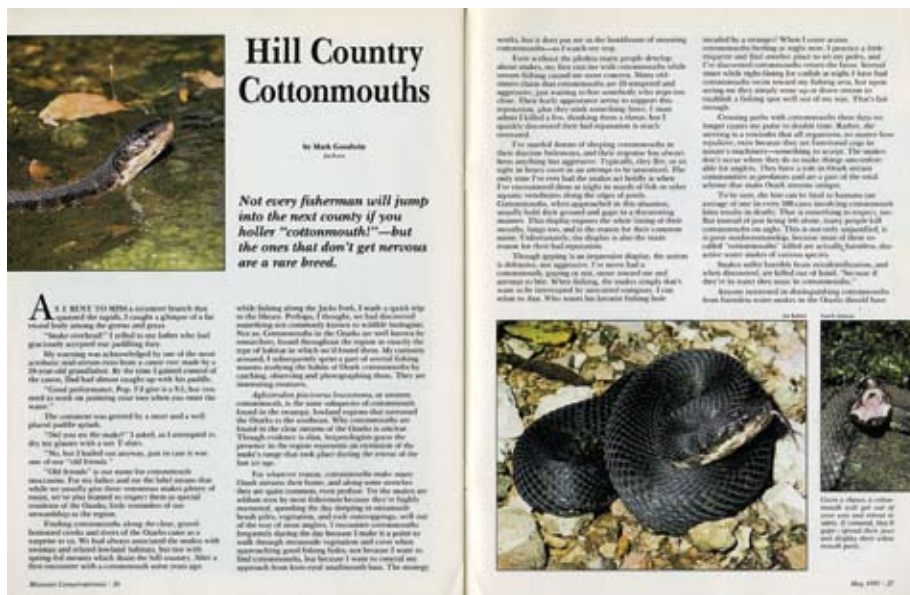


Program Supervisor STEVE WESTIN is in his 20th year as an employee of the Conservation Department. He oversees Forestry Division's private landowner assistance efforts and is focused on helping private landowners receive maximum benefits from their woodlands. Steve lives in the Jefferson City area with his wife and daughters.

TIME CAPSULE

May 1989

Hill Country Cottonmouths was written by Mark Goodwin about Western cottonmouth snakes. You can find these snakes in the Ozarks in the south-east part of Missouri. These nocturnal animals can be found sleeping during the day in streamside brush piles, rocks and vegetation. They have a reputation of being aggressive and ill-tempered, but most of them will sit tight in heavy cover or flee in an attempt not to be noticed. The top of their head is flattened and their eyes are covered by two prominent scales. Cottonmouths can be dangerous if they bite and in some cases can be fatal to humans. Common water snakes are often misidentified as cottonmouths.—by *Contributed by the Circulation Staff*



AGENT NOTES

Regulations are tailor made for individual fisheries.

EVERY SUMMER MILLIONS of people head to Missouri's Ozark rivers to enjoy their beauty and excellent fishing. Conservation agents dedicate thousands of hours during the year patrolling these rivers to protect the natural resources and to help ensure the safety of the people who enjoy them.

Ozark rivers have common characteristics: clear water, majestic bluffs and spectacular fishing for smallmouth bass and goggle-eye. What these rivers do not have in common

are fishing regulations. Each stream is unique and requires regulations specific to it in order to best manage its fish populations. Fishing regulations are based upon data collected from fish sampling, creel surveys and public input.

Regulations may be specific to an entire stream or for only a certain portion of a stream. Some regulations might restrict the daily limit of smallmouth bass, while others establish a minimum length for goggle-eye or an increased minimum length for smallmouth bass. A red or blue ribbon trout stream designation means the use of live bait and certain artificial lures are prohibited to reduce the number of trout dying from hooking.

Before heading to the river this summer, make a review of the fishing regulations for your destination a part of planning your trip. The time you invest will help protect the fisheries and keep you from violating the *Wildlife Code*. You can pick up a copy of *A Summary of Missouri Fishing Regulations* at permit vendors or you can download a PDF at www.MissouriConservation.org/2115.



Aaron Pondrom is a District Supervisor in the Ozark region. If you would like to contact the agent for your county, phone your regional Conservation office listed on Page 3.





Subscribe online

www.MissouriConservation.org/15287

*Free to
Missouri households*



“I AM CONSERVATION”

Mike Bollinger, his daughter, Jessica, and son, Mark, have made geocaching an activity for the whole family. Geocaching involves using a GPS unit to find hidden caches that others have left. The caches usually include “treasure” that finders can take as a souvenir from the experience and then finders will leave something else in exchange for the next person. “I’m an outdoor fanatic!” said Mike, “And geocaching adds a purpose to the hike and a destination.” That was really helpful in inspiring his children to get involved, he said. Now, “they just love to get out and see Missouri scenery.” For more information on geocaching on Conservation areas, visit www.mdc.mo.gov/trails/geocaching.—PHOTO BY DAVID STONNER